Application No. 10/812,069

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A rotor for a rotary electric machine, comprising:

a rotor core constructed of a helically wound material sheet, wherein

the material sheet is in a form of substantially belt and has a plurality of teeth

extending from a first side of its middle portion and a plurality of projections projecting from

a second side of the middle portion in a direction opposite to the teeth, the projections define
recesses therebetween,

each projection and each recess have substantially the same dimension with respect to a centerline between a first line passing through tops of the projections and a second line passing through bottoms of the recesses, and

the material sheet is helically wound such that the projections are located at an inner diameter side of the rotor eore.core,

wherein a dimension (H) of the teeth and a dimension (T) of the connecting portion and the projections with respect to a direction perpendicular to the longitudinal direction of the material sheet satisfy a relation $2 \times H \leq T$.

- 2. (Original) The rotor according to claim 1, wherein the teeth have one of substantially trapezoidal shapes and substantially rectangular shapes.
 - 3-5. (Canceled)
- 6. (Original) The rotor according to claim 1, further comprising: a rotor shaft fixed in the inner diameter of the rotor core, wherein the projections of the material sheet forms arcs at the tops, the arcs having curvature substantially corresponding to a curvature of an outer circumference of the rotor shaft.

- 7. (Canceled)
- 8. (Original) The rotor according to claim 1, further comprising:

 conductors mounted in slots defined between the teeth, wherein

 each of the teeth has nails projecting from its end in a substantially V-shape,

 each of the nails have a dimension such that a distance between the nail of a

 first tooth and the nail of an adjacent second tooth in a circumferential direction of the rotor

 core is smaller than a width of the conductor mounted in the slot between the first tooth and
 the second tooth in a condition that the nails are bent toward the circumferential direction.
- 9. (Original) The rotor according to claim 1, further comprising: an engaging means provided on the rotor core, wherein the engaging means is disposed to restrict separation of sheet segments of the helically wound material sheet.
- 10. (Original) The rotor according to claim 9, wherein the engaging means is integrally formed into the rotor core.
- 11. (Original) The rotor according to claim 9, wherein the engaging means is formed within the projections of the material sheet.
- 12. (Original) The rotor according to claim 1, further comprising:

 conductors mounted in slots defined between the teeth, wherein

 the conductors have substantially U-shapes and are mounted such that the rotor

 core is sandwiched in an axial direction.
- 13. (Original) The rotor according to claim 1, wherein the projections are located on an inner diameter side of the rotor core and defines gaps between them in a circumferential direction of the rotor core.
- 14. (Original) The rotor according to claim 1, wherein the rotor core is used for a permanent magnet rotary electric machine.

15-16. (Canceled)